ABSTRACT

A device for delivering fluid, such as insulin, to a patient. The device includes an exit port assembly, a syringe-like reservoir including a side wall extending along a longitudinal axis towards an outlet connected to the exit port assembly, and a plunger assembly received in the reservoir. The plunger assembly includes a two-way shape memory element connecting first and second lateral segments, and having a changeable length decreasing from an uncharged length to a charged length when at least one charge is applied to the shape memory element. Successively applying a charge and removing the charge from the two-way shape memory element causes longitudinal movement of the plunger assembly towards the outlet of the reservoir in order to cause fluid to be dispensed from the reservoir to the exit port assembly.